

IN THE SPECIFICATION:

Please amend the specification as follows:

Please replace the paragraph beginning at line 7, page 7, with the following amended paragraph:

From (3), it follows that for $m \rightarrow \infty$ the value $\frac{\partial}{\partial u} f_i(0,0)$ is unbounded if $(2\lambda_i) > 1$. For the Catmull-Clark scheme, the subdominant eigenvalue is larger than 1/2 for valences greater than 4, which proves our claim that derivatives computed based on the natural parameterization diverge around extraordinary points corresponding to extraordinary vertices of valence greater than 4.

Using the same argument, if $(2\lambda_i) < 1$ the value of $\frac{\partial}{\partial u} f_i(0,0)$ is zero for $m \rightarrow \infty$. This is the case for extraordinary points corresponding to extraordinary vertices of valence 3. FIG. 3 4 illustrates the behavior of the iso-parameter lines around extraordinary vertices of valence 3 (FIG. 3 4A), 5 (FIG. 3 4B), and 13 (FIG. 3 4C), respectively. Intuitively, the behavior of the derivatives can be observed by examining the spacing between iso-parameter lines. For valences greater than 4, the spacing between consecutive lines increases as they approach the extraordinary point as the derivatives diverge. For valence 3 the spacing between iso-parameter lines decreases as the derivatives converge to zero.